United States Environmental Protection Agency

Region 10 Emergency Response Unit

POLLUTION REPORT

I. HEADING

Date: September 15, 2001
Subject: Industrial Chrome Plating
From: Dan Heister, OSC, USEPA, Region 10, Emergency Response Unit
Tel: Office (503) 326-6869
TO: See Distribution List on last page

POLREP No.3

II. BACKGROUND

Site ID: 8P
Delivery Order No: E-01-001
Response Authority: CERCLA
FPN No: 987175064
NPL Status: NA
State Notification: Oregon Department of Environmental Quality
Action Memo Status: August 2001
Removal Start Date: August 27, 2001
Expected Completion Date: October 2001

III. SITE INFORMATION

A. Incident Category

Fund-Lead Removal Action

B. Site Description

1. Site Location

The Industrial Chrome Plating site is located in a mostly residential neighborhood on the southeast corner of NE 62nd Avenue and NE Hassalo Street in Portland, Oregon. The Portland Rifle Club and Deluxe Fuel are west of the site; an empty lot is to the east. The southern boundary of the property borders the City of Portland's Tri-Met transportation railroad track and Interstate Highway 84, which are in a swale known as Sullivan Gulch. The site consists of a main building and an outside storage area on 0.27

acres. The main building is separated into two parts: the northern portion and the southern portion. Most of the plating tanks are in the northern portion, while the southern portion contains a few smaller plating tanks and an area set aside for buffing and polishing parts. A small office is in the northwest corner of the building. The south side of the property has an asphalt driveway, a small patch of grass, and a large cellular communications tower. The southern portion of the property is fenced. Immediately south of the fence the terrain slopes steeply down for 15 to 20 feet into Sullivan Gulch and railroad tracks. Runoff water from the site flows to the gulch and railroad tracks, and access is unrestricted. The empty lot to the east of the site is fully fenced and contains a large advertisement billboard, and some parked trailers and boats. The east property boundary is fenced at the south end of the property and the building wall makes up the north end. Areas of gravel and broken asphalt make up a ten foot wide strip between the property and NE 62nd Avenue. On the west side of 62nd Avenue is the Portland Gun Club to the north and Deluxe Fuel to the south. North of the site is a residential neighborhood. Three houses are located directly across the street and one on the opposite corner of NE Hassalo and NE 62nd Avenue.

C. Assessment Results

In March of 1999, the EPA tasked Ecology and Environment Inc. (E & E) Superfund Technical Assessment and Response Team (START), to assess the risks associated with the Industrial Chrome Site. An integrated assessment of the site was conducted which identified elevated concentrations of chromium and lead at depth and in the surface of a majority of the samples. Based on the analytical results from this sampling event, the EPA tasked Ecology and Environment, Inc. to conduct a removal assessment at the ICP site to determine the full extent of surface and subsurface contamination both on and surrounding the ICP property.

Removal assessment results indicated the presence of hexavalent chromium in the surface soil contamination on the south and east sides of the building. Subsurface soil contamination is concentrated in the first ten feet on the south and east sides of the building. However, in the vicinity of the dry well (southeast of the building), significant subsurface soil contamination extends to a depth of at least 30 feet bgs, and subsurface soil. Subsurface soil samples collected from beneath the building also contained significant levels of contamination. Assessment of subsurface contamination west and south of the buildings was incomplete because overhead and subsurface utilities interfered with access to this area.

Many detections of lead in samples collected on the ICP property exceed Region 9 Preliminary Remediation Goals and/or Oregon Cleanup Levels.

Six people worked at the site until it voluntarily ceased operations in August 2001. The site is located in a mixed commercial/industrial and residential neighborhood with homes as little as 100 feet from the property to the north. Access to the site is not completely restricted, thereby increasing the potential for humans and animals to come in contact with contaminants. Soils to the south and east of the ICP building are fenced, preventing access to the area. Some of this area is capped with grass or asphalt; however, most of the contaminated area is exposed soil. Access to contaminated soils on the north and west side of the building is unrestricted. Soils on surrounding residential properties do not contain chromium above regulatory levels.

The possibility for off-site migration of chromium and lead, specifically via direct exposure to soil, particulates, surface water runoff, and groundwater can be reduced only if contaminated surface and subsurface soils at the site are removed or immobilized.

In August 2001, EPA obligated funds to conduct a removal of the soil contamination at the Industrial Chrome site which will involve: razing the building; excavating and properly disposing of contaminated soil and debris; and restoring the property so that it may be used in the future.

!!!!!Dave — Day by day activities

IV. Removal Activities

A. Situation

1. Current Situation

September 10, 2001 (Monday)
Personnel on site: Environmental Quality Management (EQM)
Superfund Technical Assessment and Response Team (START)
Rocky Mountain Catastrophe (RMCat)
Environmental Protection Agency (EPA)
United States Coast Guard (USCG)
Weather: Partly cloudy with a high in the 80s expected.

During the previous two weeks, chromic acid and other hazardous substances were removed from the interior of the former plating business and the building itself was razed with the contaminated debris hauled to proper disposal facilities. With the removal of the structure, START began an extensive soil investigation utilizing a Geoprobe truck-mounted sampler to characterize the soil (i.e. lead, chromium, hexavalent chromium) contamination at the site. Surface and subsurface soil sampling were

collected at five foot intervals from the surface to a depth of 30 feet below ground surface (bgs). START continues air sampling around the perimeter of the site continues to monitor the off-site migration of airborne particulate matter potentially laden with metals contamination. EQM excavates along the southern boundary of the site to assist in delineating the surface soil contamination where dumping is believed to have occurred. Subsurface soil sampling was completed at four locations today.

September 11, 2001 (Monday)
Personnel on site: START(5), EPA(1), EQM (4), RMCat (2), USCG (1).
Weather: Clear skies with a high of 80° F expected.

START crew continues to conduct subsurface soil sampling (to characterize the soil contamination at the site) and perimeter air monitoring. RMCat equipment operator begins excavating in an area (at the southeast corner of the former building) where a dry well is believed to exist. Dumping of chromic acid and other chemicals is believed to have occurred in this dry well. A pipe was discovered in this area at a depth of 3 feet running in a north-south direction from the building. The pipe was unearthed for approximately 15 feet away from the building where it entered into a concrete covered septic tank (dry well) at a depth of 5 feet bgs. The concrete cover (approximately 4 feet in diameter) was lifted off with the excavator exposing a 20 foot vertical dry well with approximately 6 inches of liquid and a foot of sludge. The sides of the well appeared to be discolored and corroded. Samples collected from the buried pipe and the sludge bottoms contained high levels of chromium based on XRF screenings.

START completed subsurface soil sampling at boreholes SB-14, SB-15, and SB-16 located in areas beneath (or near) the former plating building.

September 12, 2001 (Wednesday)
Personnel on site: START (5), RMCat (1), EQM (4), EPA (1), USCG (1).
Weather: Partly cloudy skies with a of 85°F expected.

The START crew continues to conduct subsurface soil sampling and field screen the samples utilizing the XRF. A billboard in the adjoining property to the site is removed today because excavation of contaminated soils around the sign will compromise the stability of the footing and present an unacceptable hazard to the cleanup crew. Employees of AK Media (the owner) and Campbell Crane removed the sign and laid it in an area outside of the contamination zone. The steel post holding the sign will be decontaminated (removal of soil and concrete) before removing from the site.

START completes sampling at borehole locations SB-17, SB-18, SB-19, and SB-20.

September 13, 2001 (Thursday)
Personnel on site: START(5), RMCat (1), USCG(1), EQM (4)
Weather: Clear skies with a high in the mid 80s expected.

EQM crew excavates additional soils along the southern edge of the site. At the southwest corner of the property, additional signs of dumping are observed. Discolored (red) powder is documented on the ground with vapor suppression plastic balls (used in the chromic acid plating baths) lying in the same area. A sample of this material is screened with the XRF indicating very high levels of chromium. Several feet of soil are immediately removed and placed in the contaminated soil stockpile.

The START crew completes boreholes at three location to a depth of 30 feet bgs. They are boreholes SB-21, SB-22, and SB-23. Samples are collected every five feet from the surface to 30 feet bgs and screened with the XRF.

September 14, 2001 (Friday)
Personnel on site: EQM (4), RMCat (1), EPA (1), START (5), USCG(1)
Weather: Sunny skies with a high in the upper 70s expected.

The southern edge (outside the chain link metal fence) of the property is excavated to a depth of 4-6 feet bgs before soils are screened with the XRF at levels below the site action levels for chromium and lead. Dumping and surface water runoff from the site are considered to be likely sources of the contamination along the southern slope of the property. The START crew conducted subsurface soil sampling on the adjacent lot to the site where previous sampling had indicated the presence of high levels of chromium at depths of 5 feet bgs. The crew completes boreholes SB-24, SB-25, and SB-26 to depths of 30 feet bgs in the adjacent lot and screening indicates contamination at depths of 20 feet bgs.

2. Removal Actions to Date

No debris or contaminated soil was removed from the site this week.

3. Enforcement

Enforcement actions are being reviewed at this time by EPA.

B. Planned Removal Activities

The removal action will involve the excavation of the majority of soil contamination at the site. Clean backfill will replace the excavated soils and an asphalt cap will aid in directing water away from the site soils. In addition, a bentonite barrier layer may be placed in the subsurface to preclude the migration of any remaining

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C. Next Steps

EPA and E&E to continue to conduct soil sampling, air sampling, X-Ray Fluorescence metals screening, subsurface soil contaminant delineation utilizing a hydraulically driven sampler, submittal of confirmation samples, and site documentation for the removal action until completion.

V. Cost Information

Estimated costs are summarized below:

	Established Ceiling	Estimated Costs (as of 9/8/01)
EPA	$37,000	$6,500
START	$180,000	$65,000
ERRS	$400,000	$243,500
Total	$617,000	$315,000

Note: The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

VI Disposition of Wastes

No contaminated soil has been removed from site thus far. The removal contractor is preparing the necessary documentation for proper disposal. Several disposal facilities may be utilized to remove all of the wastes. Hazardous liquid wastes and building debris were removed from the site during the previous two weeks of the removal action.

VII Distribution

To: Terry Eby, EPA Headquarters
Chris Field, Mary Matthews, OSCs, EPA Region 10 Emergency Response Unit
Oregon Department of Environmental Quality, Attention: Chuck Donaldson, Emergency Response

EPA Oregon Office, Attention: Dan Opalski

VII Status

Site actions continue.